

[Online & In Japan] Knowledge Co-Creation Program (Group and Region Focus)

General information on

Appropriate Sewerage Infrastructure Management (Asset Management Methodology) 課題別研修「下水道資産の適正管理(アセットマネジメント)」

JFY 2023

NO. 202208446J001 / ID. 202208446

Online Program Period: From August 22, 2023 to September 26, 2023 Course Period in Japan: From October 18, 2023 to November 1, 2023

This information pertains to one of the JICA Knowledge Co-Creation Programs (Group & Region Focus) of the Japan International Cooperation Agency (JICA) implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

JICA Knowledge Co-Creation Program (KCCP)

The Japanese Cabinet released the Development Cooperation Charter in February 2015, which stated, "In its development cooperation, Japan has maintained the spirit of jointly creating things that suit partner countries while respecting ownership, intentions and intrinsic characteristics of the country concerned based on a field-oriented approach through dialogue and collaboration. It has also maintained the approach of building reciprocal relationships with developing countries in which both sides learn from each other and grow and develop together." JICA believes that this 'Knowledge Co-Creation Program' will serve as a foundation of mutual learning process.

I. Concept

Background

In order to achieve sustainable growth in developing countries, it is essential to build a resilient society. To accomplish this goal it is necessary to properly manage existing social infrastructure, such as sewage infrastructure. The proper management includes extending service life of facilities through periodic condition assessment, maintenance and renewal of aging sewerage infrastructure, with consideration to disaster risk management.

In urban areas in developing countries, there has been an increase in the amount of water demand and discharge of waste water with population and economic growth. However, the sewerage systems frequently develop leakage due to deterioration, poor construction and low quality materials. In addition, they are vulnerable to the damage from earthquakes and have a risk of service disruption causing economic and social impacts.

Japan has experienced many earthquakes and other natural disasters, such as the Great East Japan Earthquakes and Tsunami of 2011. Moreover, the pipes laid after the period of high economic growth have exceeded their service lives one after another, and measures are being taken to prevent deterioration in each region. Through these experiences, Sendai-City has established robust asset management systems for sewage facilities (hereafter referred to as "Asset Management"); gain the ISO55001, in order to make the function of social infrastructure sustainable.

These systems and methods are highly desirable for many countries that face high risk of natural disasters and aging sewerage facilities.

This course is designed for countries where a basic sewerage system is already in place. It aims to provide the knowledge and the skills necessary to properly manage sewerage assets utilizing asset management systems with consideration to various risk management.

For what?

In the course, knowledge of and technique for Asset Management will be acquired by participants and thereby disseminated in their respective countries for the purpose of achieving sound operation and maintenance of sewerage infrastructure through their proper management.

For whom?

Senior civil engineers who are in charge of sewerage facility designing, inspection, management, maintenance and improvement, at central governments, local governments, municipalities, or other related public entities.

How?

Participants will have opportunities through online and in Japan to learn appropriate sewerage infrastructure management utilizing an asset management methodology through lectures, visits, exercises and discussions. Participants will also formulate action plans describing what they will do after going back to their own countries in order to put the knowledge and ideas acquired through this course into practice in their on-going and future activities.

II. Description

1. Title (Course No.)

Appropriate Sewerage Infrastructure Management (Asset Management Methodology) (202208446J001)

2. Online Program: August 22, 2023 to September 26, 2023

Course Period in Japan: October 18, 2023 to November 1, 2023

3. Target Regions or Countries

Brazil ,India ,Indonesia, Cambodia, Papua New Guinea, State of Eritrea, Lebanese Republic, Zimbabwe

4. Eligible / Target Organization

Central and Local governments, municipalities, or other public entities that manage sewerage facilities

5. Capacity (Upper Limit of Participants)

8 participants

6. Language

English

7. Objective(s)

Knowledge of and technique for Asset Management will be acquired by participants and thereby disseminated in their respective countries for the purpose of achieving sound operation of sewerage infrastructure through their proper management.

8. Overall Goal

Through the course, the participants acquire the knowledge and the skills necessary to properly plan, operate and manage sewerage assets utilizing appropriate asset management systems suited for individual situation in each country. The participants share the knowledge with related entities after they return to their home countries.

9. Output and Contents
This course consists of the following components. Details on each component are given below.

9-1 Training course(online) in 2023

Expected Module Output	Subjects/Agendas	Methodology
1. Participants understand problems and		
challenges that Japanese wastewater	(1) Country report presentation	Presentation by online
utilities are facing together with their effort	(2) Sewerage Administration in Japan	
to applying Asset Management.	(3) PCM training	Lectures through E-Learning
Participants evaluate their own situation in	(4) Presentation of interim report	system
comparison to those in Japan.		
2. Participants acquire basic knowledge of and technique for Asset Management required for sound management of sewerage infrastructure.	(1) Overview of Asset Management System(AMS) in Sendai City (2) Introduction video of Sendai wastewater utilities (3) Introduction video of old brick sewer in Sendai City (4) Information on sewerage redger (pipeline) (5) Inspection and condition monitoring method of the pipelines (6) Maintenance of sewege pipeline facilities (7) Maintenance of Minami-Gamo sewage treatment plant (8) Appropriate sewerage infrastructure management utilizing an asset management methodology (9) Maintenance of pumping station and wastewater treatment plant	Lectures through E-Learning
3. Participants become able to manage		
sewerage infrastructure and carry on	(1) Details of risk assessment method	Lectures through E-Learning
wastewater service considering various	(2) Making risk assessment matrix	Lectures tillough L-Leanning
risks.		

9-2 Training course in Japan in 2023

Expected Module Output	Subjects/Agendas	Methodology
1. Participants understand problems and challenges that Japanese wastewater utilities are facing together with their effort to applying Asset Management. Participants evaluate their own situation in comparison to those in Japan.	(1) Opinion exchange through latest research in sewerage sector in Tohoku univ.(2) Making risk assessment matrix	Discussion Workshop
2. Participants acquire basic knowledge of and technique for Asset Management required for sound management of sewerage infrastructure.	(1) Site-visit to Sewerage Technology Training Center in Tokyo (2) Financial planning related to sewerage infrastructure (3) Site-visit to Minami-Gamo sewage treatment plant (4) Sewer system management in suburban areas (5) Site-visit to rehabilitation of sewer pipes/facilities (6) Management of sewer ledger (7) Maintenance of sewege pipeline facilities	Lecture Observation
3. Participants prepare an action plan for improvement of their wastewater service through appropriate management of sewerage infrastructure based on the knowledge they have acquired in the course.	(1) Instruction and formulation of action plan(2) Action plan presentation	Workshop Presentation

(Tentative) Training schedule of "online program in 2023"

Note: There is a possibility of changes in plan depending on the COVID situation etc.

*Participants are required to take TWO or THREE lectures per week

in the following schedule through E-learning system.

Date	Day	Content	Туре	Attire	
22 nd Aug	Tue	Program orientation Country report presentation	Live Session	Business Casual	
22 nd ~28 th Aug		①PCM training in sewer business management ②Introduction video of Sendai Wastewater Utilities	On-demand Lecture		
29 th Aug~ 4 th Sep		 ③Overview of Asset Management System(AMS) in Sendai City ④Introduction video of old brick sewer in Sendai city ⑤Sewerage Administration in Japan 	On-demand Lecture		
5 th Sep	Tue	Analyzing problems (PCM training)	Live Session	Business Casual	
5 th ~11 th Sep		⑥Information on Sewerage Redger (Pipeline) ②Inspection and Condition Monitoring Method of the Pipelines	On-demand Lecture		
12 th ~18 th Sep		®Maintenance of Sewage Pipeline Faculties	On-demand Lecture		
19 th ~25 th Sep		@Maintenance of Pumping station and Wastewater Treatment Plant @Details of Risk Assessment Method @Making Risk Assessment Matrix	On-demand Lecture		
26 th Sep	Tue	Presentation of interim report Orientation and Q&A session on Program in Japan	Live Session	Business Casual	

(Tentative) Training schedule of "training course in Japan in 2023"

Note: There's a possibility of change in plan. This training program in Japan will be conducted jointly with the FY2022 program, and the FY2022 participants will also

participate.

Date	Day	Content	Туре	Attire	Place	Stay
18 th Oct	Wed	Arrival in Japan			Tokyo	Tokyo
19 th Oct	Thu	Briefing	Lecture	Business casual	Tokyo	Tokyo
20 th Oct	Fri	Site-visit to Sewerage Technology Training Center in Tokyo	Observation	Business casual	Tokyo	Tokyo
21 st Oct	Sat	Transfer from Tokyo to Sendai			Sendai	Sendai
22 nd Oct	Sun	Self-study			Sendai	Sendai
23 rd Oct	Mon	Opening ceremony Courtesy call	Lecture	Business	Sendai	Sendai
23" Oct	MON	Opinion exchange through latest research in sewerage sector in Tohoku univ.	Discussion	casual		
24 th Oct Tue		Financial planning related to sewerage infrastructure	Lecture	Business	Sendai	Sendai
		Instruction and formulation of action plan	Workshop	casual		
25 th Oct	Wed	Site-visit to Minami-Gamo sewage treatment plant	Lecture Observation	Business	Sendai	Sendai
		Sewer system management in suburban areas	Observation	- casual		
26 th Oct Thu		Site-visit to rehabilitation of sewer pipes/facilities	Observation	Business	C :	
26 Oct	Inu	Management of sewer ledger	Lecture	casual	Sendai	Sendai
27 th Oct	Fri	Making risk assessment matrix	Workshop	Business casual	Sendai	Sendai
28 th Oct	Sat	Cultural experience program	Observation		Sendai	Sendai
29 th Oct	Sun	Self-study			Sendai	Sendai
30 th Oct	Mon	Action plan presentation Closing ceremony Review of the course	Presentation	Business casual	Sendai	Sendai
31 st Oct	Tue	Transfer from Sendai to Tokyo			Tokyo	Tokyo
1 st Nov	Wed	Departure from Japan				

III. Eligibility and Procedures

1. Expectations to the Applying Organizations

- (1) This course is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Applying organizations are expected to use the program for those specific purposes.
- (2) This course is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These

special features enable the course to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.

2. Nominee Qualifications

Applying organizations are expected to select nominees who meet the following qualifications.

Please note that nominees would not necessarily be employed by the applying organizations, as long as they are selected officially by the organizations for their specific purposes. However, the nominees must be either person who is engaged in the said field or directly related to program subject.

(1) Essential Qualifications

- 1) Language: have a competent command of spoken and written English which is equal to TOEFL iBT 80 or more. (Please attach an official certificate for English ability such as TOEFL, TOEIC etc.)
- 2) Current Duties: be a civil engineer in charge of sewerage facility designing, revision, management and maintenance at central or local governments, municipalities, or other related public entities; be a senior level manager or an assistant manager.
- 3) Experience in the relevant field: have more than 5 years' experience as a civil engineer.
- 4) Health: must be in good health to participate in the program in Japan. To reduce the risk of worsening symptoms associated with respiratory tract infection, please be honest to declare in the Medical History (QUESTIONNAIRE ON MEDICAL STATUS RESTRICTION of the application form) if you have been a patient of following illnesses; Hypertension / Diabetes / Cardiovascular illness / Heart failure / Chronic respiratory illness.

(2) Recommended Qualifications

- 1) Age: Be under the ages of fifty (50) years
- 2) Gender Equality and Women's Empowerment: Women are encouraged to apply for the program. JICA makes a commitment to promote gender equality and women's empowerment, providing equal opportunity for all applicants regardless of sexual orientation and gender identity.

(3) IT Environment

- 1) Internet communication speed: downstream bandwidth is more than 20Mbps
- 2) Recommended browser:

Latest version of Google Chrome

Latest version of Firefox

Microsoft Edge Chromium

Latest version of Apple Safari

*IE11 is not recommended.

- 3) OS: Windows, Latest version of iOS, Latest version of Android
- 4) Software: to be installed Zoom(https://learn-zoom.us/show-me)
- 5) Device: to be prepared a PC or Tablet with camera and microphone
- * If you have any concerns about the Internet connection, please consult with the nearest JICA office

3. Required Documents for Application

- (1) Application Form: The Application Form is available at the JICA overseas office (or the Embassy of Japan)
 - * If you have any difficulties/disabilities which require assistance, please specify necessary assistances in the QUESTIONNAIRE ON MEDICAL STATUS RESTRICTION (1-(c)) of the application form. Information will be reviewed and used for reasonable accommodation.
- (2) Country Report: to be submitted with the application form. Follow the instruction on ANNEX.
 - Note: The applicant must be submitted all required documents. You will not be selected if there are any deficiencies in the documents submitted.
- (3) Photocopy of Passport: You should submit it with the application form if you possess your passport which you will carry when entering Japan for this program. If not, you are requested to submit its photocopy as soon as you obtain it.
- (4) English Score Sheet: to be submitted with the application form, if the nominees have any official English examination scores. (e.g., TOEFL, TOEIC, IELTS)

Note: The applicant must be submitted all required documents.

You will not be selected if there are any deficiencies in the documents submitted.

3. Procedures for Application and Selection

(1) Submission of the Application Documents

Closing date for applications: Please confirm the local deadline with the JICA overseas office (or the Embassy of Japan).

(After receiving applications, the JICA Office will send them to **JICA Tohoku in JAPAN not later than** <u>July 15th, 2023</u>)(Not extendable)

(2) Selection

Primary screening is conducted at the JICA overseas office (or the embassy of Japan) after receiving official documents from your government. JICA Center will consult with concerned organizations in Japan in the process of final selection. Applying organizations with the best intentions to utilize the opportunity will be highly valued.

^{*}The closing date in your country is earlier than the date noted above.

The Government of Japan will examine applicants who belong to the military or other military-related organizations and/or who are enlisted in the military, taking into consideration of their duties, positions in the organization and other relevant information in a comprehensive manner to be consistent with the Development Cooperation Charter of Japan.

(3) Notice of Acceptance

The JICA overseas office (or the Embassy of Japan) will notify the results **not** later than July 22th, 2023.

4. Conditions for Participation

The participants of KCCP are required

- (1) to strictly observe the course schedule,
- (2) not to change the air ticket (and flight class and flight schedule arranged by JICA) and lodging by the participants themselves,
- (3) to understand that leaving Japan during the course period (to return to home country, etc.) is not allowed (except for programs longer than one year),
- (4) not to bring or invite any family members (except for programs longer than one year),
- (5) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating Government and the Japanese Government in respect of the course,
- **(6)** to observe the rules and regulations of the program implementing partners to provide the program or establishments,
- (7) not to engage in political activities, or any form of employment for profit,
- (8) to discontinue the program, should the participants violate the Japanese laws or JICA's regulations, or the participants commit illegal or immoral conduct, or get critical illness or serious injury and be considered unable to continue the course. The participants shall be responsible for paying any cost for treatment of the said health conditions except for the medical care stipulated in (3) of "5. Expenses", "IV. Administrative Arrangements",
- (9) to return the total amount or a part of the expenditure for the KCCP depending on the severity of such violation, should the participants violate the laws and ordinances,
- (10) not to drive a car or motorbike, regardless of an international driving license possessed,
- (11) to observe the rules and regulations at the place of the participants' accommodation, and
- (12) to refund allowances or other benefits paid by JICA in the case of a change in schedule.

IV. Administrative Arrangements

1. Organizer (JICA Center in Japan)

(1) Center: JICA Tohoku Center (JICA TOHOKU)

(2) Program Officer: Ms.OKUBO Kaori (thictad@jica.go.jp)

2. Implementing Partner

(1) Name: JOCA (Japan Overseas Cooperative Association)

(2) URL: https://www.joca.or.jp/base/tohoku/

3. Travel to Japan

- (1) Air Ticket: In principle, JICA will arrange an economy-class round-trip ticket between an international airport designated by JICA and Japan.
- **(2) Travel Insurance**: Coverage is from time of arrival up to departure in Japan. Thus traveling time outside Japan (include damaged baggage during the arrival flight to Japan) will not be covered.

4. Accommodation in Japan

Basically, JICA will arrange the following accommodation(s) for the participants in Japan:

JICA Tokyo Center (JICA TOKYO)

Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan

TEL: +81-3-3485-7051 FAX: +81-3-3485-7904

(where "81" is the country code for Japan, and "3" is the local area code)

Please refer to facility guide of JICA TOKYO at its URL,

https://www.jica.go.jp/tokyo/english/office/index.html

<u>If there is no vacancy at JICA TOKYO</u>, JICA will arrange alternative accommodation(s) for the participants.

5. Expenses

The following expenses in Japan will be provided by JICA

- (1) Allowances for meals, living expenses, outfits, and shipping and stopover.
- (2) Expenses for study tours (basically in the form of train tickets).
- (3) Medical care for participants who become ill after arriving in Japan (the costs related to pre-existing illness, pregnancy, or dental treatment are <u>not</u> included).
- (4) Expenses for program implementation, including materials.
- (5) For more details, please see "III. ALLOWANCES" of the brochure for participants titled "KENSHU-IN GUIDE BOOK," which will be given before departure for Japan.

*Link to JICA HP (English/French/Spanish/Russian):

https://www.jica.go.jp/english/our work/types of assistance/tech/acceptance/training/index.html

6. Pre-departure Orientation*

A pre-departure orientation will be held at respective country's JICA office (or the Japanese Embassy), to provide Participants with details on travel to Japan, conditions of the course, and other matters.

*YouTube of "Knowledge Co-Creation Program and Life in Japan" and "Introduction of JICA Center" are viewable from the link below.

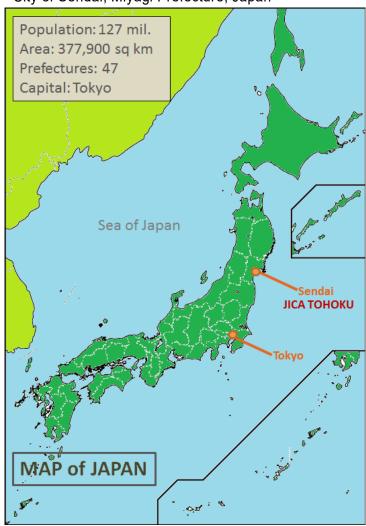
Image videos of 'Introduction of JICA Center (YouTube)' show the following information of JICA Centers: Location, Building, Entrance, Office, Accommodation (Room), Amenities (Hand dryer), Bathroom(Shower and Toilet), Toiletries etc.

Part I: Knowledge Co-Creation Program and Life in Japan					
English ver. https://www.youtube.com/watch?v=SLurfKugrEw					
Part II: Introduction of JICA Centers in Japan					
JICA Tohoku https://www.jica.go.jp/tohoku/english/office/index.htt					

V. Other Information

1. Location of the training site

City of Sendai, Miyagi Prefecture, Japan



2. Climate

Average temperatures and precipitation in Sendai

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average High (° C)	5.2	5.5	8.8	14.8	19.5	22	25.7	27.9	24.1	19.1	13.4	8.3
Average Low (° C)	-2	-1.8	0.5	5.7	10.8	15.3	19.3	21.2	17.2	10.8	4.9	0.6
Average Precipitation (mm)	33.1	48.4	73	98.1	107.9	137.9	159.7	174.2	218.4	99.2	66.8	26.4

3. Computers(Program in Japan)

The participants are recommended to bring their own laptop/notebook computers

- (*1) to prepare for Action Plans and presentation slides, and to check personal e-mail.
- (*2) Laptop/notebook computers should have antivirus software installed, and must not have file sharing software, such as Winny, WinMX, BitTorrent and Gnutella.

4. International Exchange Programs with Local Communities.

JICA encourages international exchanges between JICA participants and the local communities. Participants are kindly requested to bring their national costumes, small gifts and visual aids, such as powerpoint slides, videos and photographs, to introduce their countries.



Observation to pump station



Observation to office of river



Program Orientation



Closing Ceremony



Traveling by train



Workshop

5. About JICA Tohoku Center

Website: https://www.jica.go.jp/tohoku/index.htm



Find us on facebook at https://www.facebook.com/Jicatohoku









JICA Plaza Tohoku

Conference Room

JICA Tohoku

VI. Annex

Country Report

(to be submitted with the Application Form)

Please prepare a report describing the following.

1. Overview of your organization:

- The name of your organization and the population of your city
- Describe the sewerage facility improvement plans and expected year of the operation, if any.
- The total area of the existing sewer coverage and the population within the covered area.
- The adoption ratio of sewage systems and the time of the sewage systems undertaken first
- The total length of the sewer pipes repaired or replaced per annum and the materials of the pipes.
- The wastewater treatment plants in your area (If any) The volume of water discharge and the quality of discharged water.
- Describe how the sewerage facilities, including processing plants and pipelines managed in your area. The management method (run by public entities or contract out to private companies)
- Total number of employees and budget, including the initial construction, operation and maintenance cost.
- List ongoing major projects/themes in the field of sewerage works.

2. About your job:

- Describe your position and duty within the organization
- Organization chart: Schematic presentation of your organization (Please indicate your present position in the chart)
- The major issues and challenges you face at work.
- Your expectations for the course (What would you like to learn in the course?)

3. Management of sewer lines:

- The number of road subsidence incidents caused by deterioration of sewer lines.
- Do you perform replacement and repair of sewer pipes on a regular basis? If so,

how long is the replacement length of sewer lines?

- Do you perform inspections of sewer pipes with a TV camera? If so, what are the criteria for evaluation of the result?
- Do you use geographic information system (GIS) for sewer line ledger?

4. Risk management practices:

- The types of risks you are most concerned with, in managing sewerage facilities. i.e. earthquake, tsunami, flood, sinkholes, aging
- Do you have a disaster management manual?
- Do you have construction standards for sewerage facilities?

5. Presentation material (Power Point slides)

Contents (max:4slides);

- -country overview
- -major issue
- -on-going action
- -expectation for the program

Note:

The deadline to submit your Country Report to JICA is <u>July 15th</u>, <u>2023</u>. Country Report is part of the application, and it will be used to screen applicants. **Application forms without Country Report will be rejected**.

The report is going to be the basis for your Action Plan, which is to be presented at the end of the course. Therefore, participants are encouraged to discuss its content with their supervisors and colleagues.

The participants are also asked to present their Country Report at the beginning of the online program.

For Your Reference

JICA and Capacity Development

Technical cooperation is people-to-people cooperation that supports partner countries in enhancing their comprehensive capacities to address development challenges by their own efforts. Instead of applying Japanese technology per se to partner countries, JICA's technical cooperation provides solutions that best fit their needs by working with people living there. In the process, consideration is given to factors such as their regional characteristics, historical background, and languages. JICA does not limit its technical cooperation to human resources development; it offers multi-tiered assistance that also involves organizational strengthening, policy formulation, and institution building.

Implementation methods of JICA's technical cooperation can be divided into two approaches. One is overseas cooperation by dispatching experts and volunteers in various development sectors to partner countries; the other is domestic cooperation by inviting participants from developing countries to Japan. The latter method is the Knowledge Co-Creation Program, formerly called Training Program, and it is one of the core programs carried out in Japan. By inviting officials from partner countries and with cooperation from domestic partners, the Knowledge Co-Creation Program provides technical knowledge and practical solutions for development issues in participating countries.

The Knowledge Co-Creation Program (Group & Region Focus) has long occupied an important place in JICA operations. About 400 pre-organized course cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs is being customized by the different target organizations to address the specific needs, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

Japanese Development Experience

Japan, as the first non-Western nation to become a developed country, built itself into a country that is free, peaceful, prosperous and democratic while preserving its tradition. Japan will serve as one of the best examples for our partner countries to follow in their own development.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from a process of adoption and adaptation, of course, has been accompanied by countless failures and errors behind the success stories.

Through Japan's progressive adaptation and application of systems, methods and technologies from the West in a way that is suited to its own circumstances, Japan has

developed a storehouse of knowledge not found elsewhere from unique systems of organization, administration and personnel management to such social systems as the livelihood improvement approach and governmental organization. It is not easy to apply such experiences to other countries where the circumstances differ, but the experiences can provide ideas and clues useful when devising measures to solve problems.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



Contact Information for Inquiries

For inquiries and further information, please contact the JICA overseas office or the Embassy of Japan. Further, address correspondence to:

JICA Tohoku Center (JICA TOHOKU)

Address: 20th Floor, Sendai Dai-ichi Seimei Tower Building,
4-6-1 Ichiban-cho, Aoba-ku, Sendai-shi, Miyagi-ken, 980-0811 Japan

TEL: +81-22-223-5775 FAX: +81-22-227-3090